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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/692,575

10/18/2000

Paul Harold Kavulak

257/081

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11/15/2004

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EXAMINER

FERRIS, DERRICK W

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No. ~~6~~

09/692,575

Applicant(s)

KAVULAK ET AL.

Examiner

Derrick W. Ferris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-42 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 18 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/27/2004.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. **Claims 1-42** as amended are still in consideration for this application. Applicant has amended claims **1, 9-16, 22, and 23**. Applicant has canceled claims **no claims**. Applicant has added claims **24-42**.
2. Examiner **withdraws** the anticipated rejection to *Uppaluru* for the previous Office action. In addressing applicant's arguments in the response filed **08/17/2004**, the examiner respectfully disagrees with applicant but has thus replaced the rejection with an obviousness rejection to further clarify the examiner's position. In particular, applicant teaches either a one-to-one or a one-to-many hub model, see applicant's specification at page 17, line 6. Applicant has amended the claims to further clarify only a one-to-many hub model. Examiner notes such a model is still anticipated by *Uppaluru*. In addition, the examiner has supplied a secondary reference to further clarify the argument that is also would have been obvious.

In addition, please also see the new rejection also based on applicant's amendment. The reference used was also cited which is in the previous office action (see conclusion of last Office action).

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. **Claims 1-7, 9, 13, and 16-42** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 5,923,745 A to *Hurd*.

As to **claim 1**, see figure 2 of *Hurd*. In particular, a hub is shown as PSTN 20 in combination with NRU 42, a plurality of remote sites are shown as call centers 16, and a connection of one-to-many is shown in the figure as part of a hub-and-spoke model, see e.g., column 7, lines 47-61. In particular note that the NRU 42 can be co-located with any equipment in the PSTN 20 including toll switch 36. Also note that figure 2 shows one PSTN 20(including the NRU 22) and many call centers 16.

As to **claim 2**, see figure 2.

As to **claims 3-4**, ATM is supported, see e.g., column 4, lines 45-57.

As to **claims 5-6**, the NRU 42 contains a VRU, see e.g., figure 3.

As to **claim 7**, see similar rejection to claims 3-4.

As to **claims 9**, see figure 2 where the locations are at different LECs.

As to **claim 13**, the call centers are staffed by live operators, see e.g., column 10, lines 10-26.

As to **claim 16**, see the ACD in figure 2.

As to **claim 17**, see the PSTN in figure 2.

As to **claims 18-20**, see the relationship in figure 2.

As to **claims 21-22**, see e.g., links 23 and 25 going to the remote site.

As to **claim 23**, see similar reasoning for the rejection to claim 1.

As to **claim 24**, see similar reasoning for the rejection to claim 1. With respect to availability of workforce to meet staffing needs and wherein at least some of the

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parameters represent staggered times, see e.g., column 10, lines 10-25. In particular, the calls are configurable based on total number of representatives and time a call is received.

As to **claim 25**, see similar reasoning for the rejection to claim 24.

As to **claim 26**, see similar reasoning for the rejection to claim 24. Since front end processing is used in the PSTN, capital assets are maximized.

As to **claim 27**, see similar reasoning for the rejection to claim 24.

As to **claim 28**, see similar reasoning for the rejection to claim 24.

As to **claim 29**, column 10, lines 10-26 where workflow needs are taken into consideration.

As to **claim 30**, see similar reasoning for the rejection to claim 24.

As to **claim 31**, see similar reasoning for the rejection to claim 24.

As to **claim 32**, see similar reasoning for the rejection to claim 24.

As to **claims 33-37**, see e.g., figure 2 where the PSTN 20 is a single hub.

As to **claim 38-39**, see figure 3 where the NRU 42 contains a VRU 52. In particular, the VRU translates DNIS parameters, see e.g., column 5, lines 25-29; column 5, lines 56-67; column 6, lines 23-39; and column 8, lines 16-33. In particular, since the call is routed to at least one of the call centers 16 the internal DNIS number is modified.

As to **claim 40**, see the similar rejections for claim 1 and figure 3 which shows a VRU 52 for NRU 42.

As to **claim 41**, see similar reasoning for the rejection to claim 33.

As to **claim 42**, see similar reasoning for the rejection to claim 38.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-37, and 40-41** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,011,844 A to *Uppaluru et al.* ("*Uppaluru*") in view of "ATM Theory and Application" to *McDysan et al.* ("*McDysan*").

As to **claim 1**, *Uppaluru* teaches a telecommunications system adapted to perform as a call receiving center for an inbound telemarketing campaign. With respect to the anticipated rejection, *Uppaluru* discloses a scalable network architecture. In particular, *Uppaluru* shows in figure 5, a POP call center 152 that acts as a hub which interfaces with various business call center spokes 150 where each spoke is from the same business center. Here the business call centers are geographically dispersed from the POP call center (i.e., the backend is at a different location). Furthermore, examiner notes specifically functionality in the front end as opposed to the back end. Specifically, in comparison to applicant's figure 2, the IVR (i.e., the VRU) is in the front end (i.e., the hub) while the ACD is in the back end (i.e., the spoke or remote site), see e.g., column 2, lines 43-67. The gateway uses the translated 800 number (that was translated to a local number) to identify an IVR application that can either be replicated at the POP call center or dynamically accessed from the business call center (i.e., remote site). Specifically, the POP call center (i.e., hub) responds to the incoming call with an IVR application

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customized to the business call center that was called by the customer. The connectivity member can be either the long distance network 14 or the call center network 148 where the call center network can also transport voice.

What may be at issue is the further limitation a connectivity member connecting the hub to the remote sites *so that the hub has a one-to-many relationship with the remote sites*. Examiner notes that the above limitation is taught by the reference. In particular, *Uppaluru* teaches a one-to-one relationship, a one-to-many relationship, and a many-to-many relationship. An example of one-to-many is shown e.g., column 3, lines 30-35, and in figure 5 and column 4, lines 60-64. In particular, note one POP call center to one or more premise call centers. However, assuming for the sake of argument that the above section is not clear, the examiner also notes the following obviousness rejection below as well.

*McDysan* teaches the above limitation of a one-to-many relationship as shown in figure 10.12 on page 306.

Thus examiner proposes to modify *Uppaluru* to clarify a one-to-many relationship.

In particular, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include a one-to-many relationship. Specifically, one skilled in the art would have been motivated to use a one-to-many relationship in order to maintain a hierarchical manner. *McDysan* teaches the above motivation e.g., at bottom of page 305. Examiner also notes a very strong reasonable expectation of success since

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both references teach ATM, see e.g., column 4, line 65 of *Uppaluru*. In addition, ATM is a hub-and-spoke or star topology (i.e., one-to-many).

As to **claims 2-4**, see e.g., column 4, lines 60-67 of *Uppaluru*.

As to **claims 5-6**, see e.g., column 2, lines 43-56 of *Uppaluru*.

As to **claims 7-8**, see e.g., column 4, lines 60-67 of *Uppaluru*.

As to **claims 9-12**, see e.g., column 4, lines 25-30 of *Uppaluru*.

As to **claim 13**, see e.g., column 3, lines 57-63 of *Uppaluru*.

As to **claims 14-15**, see e.g., column 4, lines 60-67 of *Uppaluru*.

As to **claim 16**, see e.g., column 3, lines 58-67 of *Uppaluru*.

As to **claims 17-20**, see e.g., figure 3 of *Uppaluru*.

As to **claims 21-22**, see column 5, lines 1-14 of *Uppaluru*.

As to **claim 23**, see similar rejection to claim 1 of *Uppaluru*.

As to **claim 24**, see similar rejection to claim 1 of *Uppaluru*. Applicant further clarifies wherein at least some of the parameters represent staggering times of operation for the remote call center sites as sites that are geographically dispersed in several time zones, see applicant's specification at page 7, lines 15-21. *Uppaluru* teaches that the pop business call centers are geographically dispersed. Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the further limitation of wherein at least some of the parameters represent staggering times of operation for the remote call center sites. In particular, one skilled in the art would have been motivated to stagger the time by placing the call centers in different geographical locations. In particular, *Uppaluru* provides the above motivation since the business call



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centers are geographically dispersed, see e.g., column 5, lines 60-67 and column 6, lines 30-44. One skilled in the art would note that business call centers over a long distance network would be time staggered. Staffing needs are further met due to the geographically dispersed business call centers. Also note that the business call centers are further selected based on cost efficiencies, see e.g., column 6, lines 11-44.

As to **claim 25**, see similar rejection to claim 24.

As to **claim 26**, see similar rejection to claim 24. Note that in a hub and spoke model that hub may contain more equipment which minimizes the capital assets located between the respective remote call centers.

As to **claim 27**, see similar rejection to claim 24.

As to **claim 28**, see similar rejection to claim 24.

As to **claim 29**, see similar rejection to claim 24.

As to **claim 30**, see similar rejection to claim 24.

As to **claim 31**, see similar rejection to claim 24. Note that the respective time is based on the distance from the call central gateway.

As to **claim 32**, see similar rejection to claim 24.

As to **claim 33**, see similar rejection to claim 24.

As to **claim 34**, see similar rejection to claim 24.

As to **claim 35**, see similar rejection to claim 24.

As to **claim 36**, see similar rejection to claim 24.

As to **claim 37**, see similar rejection to claim 24.

As to **claim 40**, see similar rejection to claim 24. With respect to routing phone numbers also see column 3, lines 1-12. Applicant also admits that claim 40 is further supported by *Uppaluru* (see applicant's remarks on page 11 with respect to claim 40).

As to **claim 41**, see similar rejection to claim 24.

7. **Claims 10-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,923,745 A to *Hurd*.

As to **claims 10-12**, *Hurd* discloses that the call centers are geographically dispersed. Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to teach the further limitation of a separation of at least ten feet or more, one mile or more, or in different states. In particular, one skilled in the art would have been motivated to separate the call centers 16 from the above distance for the purpose of staffing and costs, see e.g., column 10, lines 10-25.

8. **Claims 38, 39 and 42** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,011,844 A to *Uppaluru et al.* ("*Uppaluru*") in view of "ATM Theory and Application" to *McDysan et al.* ("*McDysan*") in further view of "Merging Voice Communications and Information Processing Using a Platform for Voice Information Services" to *McAllister et al.* ("*McAllister*").

As to **claim 38**, *Uppaluru* discloses a VRU as an IVR at the POP call center gateway (i.e., hub), see e.g., column 2, lines 41-56. In particular, examiner notes that applicant admits that an IVR and VRU are equivalent, see e.g., applicant's specification at page 13, lines 10-13.

*Uppaluru* is silent or deficient to using DNIS parameters. In particular, *Uppaluru* discloses using 800 numbers instead, see e.g., column 3, lines 1-16.

*McAllister* teaches that it is known in the art to use DNIS values as well as 800 numbers, see e.g., bottom left-hand column on page 882. Thus examiner proposes to modify *Uppaluru* to further include DNIS values. Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to use DNIS values. In particular, one skilled in the art would have been motivated to use DNIS values in place of 800 numbers for the purpose of merging voice communications such as providing access to both private and public networks. As such, *McAllister* provides the above motivation at e.g., bottom left-hand column on page 882. Therefore, the combined references teach an internal and external DNIS value since *Uppaluru* teaches an internal/external phone number, see e.g., column 3, lines 1-16 where phone numbers are also DNIS values as taught by *McAllister*.

As to **claim 39**, see similar rejection to claim 38.

As to **claim 42**, see similar rejection to claim 38.

9. **Claims 8, and 14-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,923,745 A to *Hurd* in further view of "Convergence Between Public Switching and the Internet" to *Schoen et al.* ("*Schoen*").

As to **claim 8**, *Hurd* may be silent or deficient to using frame relay. In particular, *Hurd* teaches using ATM and other similar protocols, see e.g., column 4, lines 45-56. Examiner proposes to modify *Hurd* to include other similar protocols as frame relay. In particular, *Schoen* teaches frame relay. Thus examiner notes that it would have been

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obvious to one skilled in the art prior to applicant's invention to further include a first switch that supports frame relay. In particular, one skilled in the art would have been motivated to perform frame relay in the PSTN as part of Internetworking. As such, *Schoen* teaches the above motivation e.g., on the right-hand column of page 54.

As to **claim 14-15**, see similar reasoning for the rejection to claim 8.

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris  
Examiner  
Art Unit 2663

  
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